

Notice of Allowability**Application No.**

10/817,205

Examiner

SHEW-FEN LIN

Applicant(s)

CORNWELL ET AL.

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/24/08.
2. ☒ The allowed claim(s) is/are 1,3-6,9-12,14-18, 21-23, 25-28, 31-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 6/4/2008
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 8/19/08
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

- a. This action is taken to response to amendments and remarks filed on 6/24/08.
- b. Claims 1, 3-6, 9-12, 14-18, 21-23, 25-28, and 31-33 (renumber as 1-24) are allowed.

Withdrawal of Rejections/Objections

In view of the amendments, submitted on 6/24/08, Examiner hereby withdraws the rejection/objections that were given in the previous Office Action.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone conversation with Applicant's attorney Joseph A. Sawyer on August 19, 2008.

Please enter the amendment filed on 6/24/08 and further amend as follows:

1. (Currently Amended) A method for controlling concurrency of access to data in a database system having a database engine, data manager and database, the method comprising:
providing for enabling and indexing of selective partition locking of a table;
partitioning a the table in the database system into a plurality of partitions;

receiving a lock request having one or more statements for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the database system containing the data;

determining a minimum lock state for each statement of the request;

wherein the determining a minimum lock state for each statements of the request further comprises creating one or more control blocks for a called operation in relation to the one or more statements and copying to the one or more control blocks in relation to the table, one or more of: state of a selective partition locking, selected locking granularity, a lockmax value;

identifying a partition of the plurality of partitions that contains the row or the page in the database system containing the data;

associating the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock selectively locking the partition at a the minimum lock state that permits serialized access to data in the partition; and serially accessing the data in the partition using the partition lock, responsive to the data being committed at a time of receiving the lock request, accessing the data without using the partition lock[[.]], wherein ~~otherwise~~ locking by the partition lock is avoided.

12. (Currently Amended) A digital computer system including a computer having a central processing unit and a memory unit containing computer software for operating the computer and having executable instructions for, managing access to data in a database system having a

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database engine, data manager and database, the system comprising executable instructions providing for:

providing for enabling and indexing of selective partition locking of a table;

[[a]] partitioning the table in the system into a plurality of partitions; and

the data manager for managing data in the system configured to:

receive a lock request having one or more statements for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the system containing the data;

determine a minimum lock state for each statement of the request;

wherein the determining a minimum lock state for each statements of the request further comprises creating one or more control blocks for a called operation in relation to the one or more statements and copying to the one or more control blocks in relation to the table, one or more of: state of a selective partition locking, selected locking granularity, a lockmax value;

identify a partition of the plurality of partitions that contains the row or the page in the system containing the data;

associate the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock selectively locking the partition at a the minimum lock state that permits serialized access to data in the partition; and serially accessing the data in the partition using the partition lock, wherein the data manager is further configured to access the data without using the partition lock responsive to the data being

committed at a time the data manager means received the lock request, wherein **otherwise** locking by the partition lock is avoided[;]L

23. (Currently Amended) A computer readable medium encoded with a computer program providing for controlling concurrency of access to data in a database system including a computer having a central processing unit and a memory unit containing computer software for operating the computer and the computer program comprising computer executable instructions for:

providing for enabling and indexing of selective partition locking of a table;

partitioning the table in the database system into a plurality of partitions;

receiving a lock request having one or more statements for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the database system containing the data;

determining a minimum lock state for each statements of the request;

wherein the determining a minimum lock state for each statements of the request further comprises creating one or more control blocks for a called operation in relation to the one or more statements and copying to the one or more control blocks in relation to the table, one or more of: state of a selective partition locking, selected locking granularity, a lockmax value;

identifying a partition of the plurality of partitions that contains the row or the page in the database system containing the data;

associating the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock selectively locking the partition at a the minimum lock state that permits serialized access to data in the partition; and serially accessing the data in the partition using the partition lock, wherein the lock state protects against interference in the form of updates to the partition, accessing the data without using the partition lock responsive to the data being committed at a time of receiving the lock request, wherein ~~otherwise~~ locking by the partition lock is avoided.

34-39. (Cancelled)

Reason for Allowance

The following is an Examiner's statement of reasons for allowance:

The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claims 1, 12, and 23. More specifically, the prior art of records does not teach or suggest, independently or in combination, the combination of claimed elements including the specific features as argued by Applicant and further amended by an Examiner's Amendment.

The dependent claims, being definite, further limiting, and fully enabled by the specification and are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEW-FEN LIN whose telephone number is (571)272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shew-Fen Lin /S. L./
Examiner, Art Unit 2166
August 19, 2008

/Hosain T Alam/

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Supervisory Patent Examiner, Art Unit 2166